

# PATENT ABSTRACTS OF JAPAN

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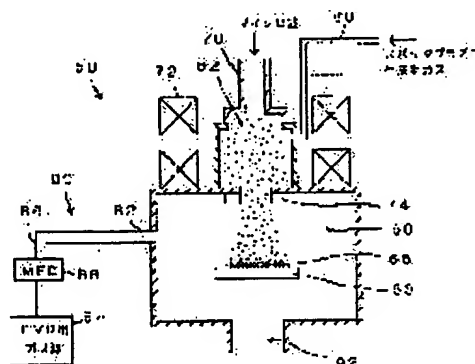
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## (54) FILM FORMING METHOD AND FILM FORMING DEVICE USING ELECTRON CYCLOTRON RESONANCE

### (57)Abstract:

**PURPOSE:** To provide the film forming method and film forming device which can form thin films uniformly at a high thin film forming speed on a substrate and use electron cyclotron resonance (ECR).

**CONSTITUTION:** The film forming method consists in forming the thin film by executing sputtering with the plasma formed by ECR and simultaneously forming the thin film of the same kind as the thin film formed by the sputtering by an ECR-CVD method. The ECR film forming device consists of (a) a sputtering plasma chamber 62 which is disposed with a magnet 68 on the outer side, (b) a waveguide 70 which is mounted at one end to the sputtering plasma chamber 62 and is mounted to a microwave generator, (c) a film forming chamber 60, the inlet part of which is communicated with the outlet part of the sputtering plasma chamber, (d) a sputtering target 74 which is disposed in the inlet part of the film forming chamber so as to enclose the plasma flow formed of the sputtering plasma chamber and (e) a gas introducing part 82 for CVD which is provided in the film forming chamber.



### LEGAL STATUS

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